CRIME SCENE INVESTIGATION AND MANAGEMENT

LEARNING OUTCOMES

After completing this chapter, you should be able to:

- Identify some of the myths surrounding crime scene investigation.
- Describe the legal duty of police to collect and preserve evidence.
- Understand the importance of preventing contamination and maintaining continuity in collecting and preserving evidence.
- Explain what a crime scene is, why it needs to be protected, and the legal basis for crime scene security.
- Describe the roles and responsibilities of the various individuals involved in the investigation and management of a crime scene.
- Explain the importance of properly documenting a crime scene.
- Outline measures that can be taken to minimize contamination and ensure continuity of evidence.

INTRODUCTION

The ability of a criminal investigator to determine what happened at a crime scene and the ability of a Crown attorney to accurately re-create that scene through evidence introduced in a courtroom are both affected by the way in which the crime scene is protected and how the physical evidence found there is documented, collected, and preserved. In large part, this is determined by the actions of police officers from the moment they arrive at the scene to the time the first police witness takes the stand to give evidence in court.

This chapter examines some common myths regarding crime scene investigation; the legal obligations of police officers regarding the collection and preservation of physical evidence; what a crime scene is and how to protect it; the individuals involved in investigating and managing the scene of a crime; and the documentation, collection, and preservation of physical evidence.

CRIME SCENE INVESTIGATION: MYTHS AND REALITY

CSI effect
the alleged influence of popular television crime investigation programs on juror behaviour and the broader public's understanding of the criminal investigation process

Portrayals of criminal investigators (detectives)—in particular, crime scene investigators—are a staple of popular entertainment. They figure prominently in television programs and movies. The term **CSI effect** has emerged to describe the alleged influence of popular television crime investigation programs—in particular, the CBS network program *CSI*—on juror behaviour and the broader public's understanding of the criminal investigation process (Podias, 2017; Schanz, 2016). Questions have also been raised concerning whether such programs help individuals acquire forensic knowledge that could help them elude detection when committing crimes (Zaikman & Vicary, 2017). Such fictional portrayals contribute to an unrealistic view of how crime scene investigators and forensic scientists actually work—for example, on television, both the investigations and the forensic analysis of evidence are typically completed within hours, if not sooner. The real abilities of the professionals involved are often exaggerated or simply made up. And forensic scientists typically present their findings in court with a level of certainty that allows for little or no chance of error. However, in reality, this is not how forensic science—or the criminal investigation process—works.

Television programs in this area appear to have motivated a number of young people to consider careers in criminal justice and, in particular, those that deal with some aspect of crime scene investigation (National Academy of Sciences [NAS], 2009, p. 222; Weaver et al., 2012), and institutions of higher learning have recognized the commercial potential of programs which promise to prepare students for careers in the field of criminal investigation (Barthe, Leone, & Lateano, 2013). Within criminal justice programs, many students express a desire to become crime scene investigators, criminal profilers, or forensic scientists (Anderson, Mangels, & Langsam, 2009). Although glamorizing the job of a

criminal investigator makes for good entertainment, it unfortunately misinforms people about the realities of the work. Therefore, during their studies and careers, many students need to unlearn what they have been taught about crime scene investigation from popular sources. At the very least, students need to realize that forensic work is more tedious—and less certain—than TV leads them to believe.

CSI myths are clustered around the following areas (Durnal, 2010):

- the roles of the various actors involved in the collection and analysis of crime scene evidence,
- the real capabilities of crime scene investigators,
- the nature of the evidence typically found at a crime scene, and
- the time frame in which the collection and analysis of evidence takes place.

The following sections discuss the myths and corresponding realities listed above and paint a more accurate picture.

WHO'S WHO IN AN INVESTIGATION?

Uniformed patrol officers. Typically, **uniformed police constables** are assigned to a defined area, which they patrol. They also respond to emergency calls for service. They are usually the first police officers to arrive at a crime scene and are responsible for ensuring the safety of the public, arresting any offenders present, and securing the crime scene. The first uniformed patrol officer to arrive at a crime scene assumes control of that scene until relieved of that responsibility by a supervisory officer or a forensic identification specialist.

uniformed police constables
officers who primarily patrol defined areas to which they are assigned and respond to emergency calls for service

Uniformed police supervisor. A police supervisor in the uniform branch typically holds the rank of sergeant and is responsible for the supervision of a number of uniformed patrol constables; a police supervisor in the detective branch typically holds the rank of detective or above. **Uniformed police supervisors** are primarily responsible for ensuring the quality of the uniformed response to calls for assistance; they may also supervise a number of detective constables. When uniformed police officers are called to a crime scene, a sergeant is initially responsible for ensuring that sufficient resources are made available to properly protect and manage the scene. The sergeant assumes control of the crime scene until relieved by a criminal investigator or forensic investigation specialist.

uniformed police supervisors
typically, sergeants responsible for the supervision of uniformed patrol constables who ensure the quality of the uniformed response to calls for service

Detective. Also referred to as criminal investigator, investigator, or investigative officer, a **detective** is a police officer (who may hold any one of a number of different ranks, such as constable, sergeant, or staff sergeant) whose primary role is the investigation of crimes. Typically the officer in charge of a criminal investigation, a detective's responsibilities include conducting and managing the investigation, laying criminal charges, preparing the criminal case for court, and, when requested, assisting the prosecutor when the case goes to court. An investigation can have multiple detectives.

detective
also referred to as a criminal investigator, an investigator, or an investigative officer; typically, the officer in charge of a criminal investigation

forensic identification specialist
also referred to as an identification (or "ident") officer, an FIS officer, a SOCO (scenes of crime officer), or a CSI (crime scene investigator); the person responsible for the physical investigation of the crime scene, including identifying, documenting, collecting, preserving, and analyzing or submitting for analysis the physical evidence obtained from a crime scene

forensic scientist
a civilian laboratory scientist with analytical expertise in, for example, chemistry, biology, firearms, or documents, who analyzes and reports on evidence

forensic pathologists
medical doctors with specialized training in forensic pathology who conduct autopsies and determine the manner and cause of death in suspicious circumstances

Forensic identification specialist. Sometimes referred to as an identification (or "ident") officer, an FIS officer, a SOCO (scenes of crime officer), or a CSI (crime scene investigator), a **forensic identification specialist** is responsible for the physical investigation of the crime scene. In Canada, forensic identification specialists are usually police officers with specialized training and experience in locating, collecting, and preserving evidence from crime scenes. Their responsibilities include identifying, documenting, collecting, preserving, and analyzing or submitting for analysis the physical evidence obtained from a crime scene. While they may sometimes conduct an analysis of the evidence themselves—typically in the case of fingerprints or boot marks—they are also responsible for ensuring that the physical evidence gathered from a crime scene is properly submitted to other specialists, such as forensic scientists, for analysis. The work of forensic identification specialists is outlined in Chapter 8, Pattern, Tool Mark, and Firearm Evidence.

Forensic scientist. A **forensic scientist** is a civilian investigative specialist with scientific training and analytical expertise in a specific area—for example, chemistry, biology, firearms, or documents. Although forensic scientists sometimes work in police laboratories—for example, those run by the RCMP—they frequently work in laboratories that are independent of the police—for example, the Centre of Forensic Sciences in Toronto. Forensic scientists are discussed in Chapter 4, The Role of Science in Investigations. Briefly, forensic scientists are responsible for conducting objective scientific analyses of evidence submitted to them by police and others and for generating a report of their findings. Forensic scientists might give expert opinion evidence about their findings in court during criminal proceedings but rarely attend crime scenes—for example, a forensic archaeologist or anthropologist might assist in the proper recovery of buried or scattered human remains.

Forensic pathologist. A medical doctor with specialized training in forensic pathology, **forensic pathologists** are responsible for conducting post-mortem examinations (or autopsies) of people who die suddenly in order to determine the cause of their death. Forensic pathologists use their specialized knowledge of medicine, science, and law to explain what may have caused or contributed to such deaths, and they offer expert opinions regarding their analyses and findings to a variety of legal bodies, such as criminal courts.

ROLES AND RESPONSIBILITIES OF THOSE INVOLVED IN CRIME INVESTIGATION

No CSI effect is more apparent than in the confusion surrounding the roles of the people involved in crime investigation. On television, the patrol officer, detective, crime scene investigator, and forensic scientist are often rolled into the same character. That character gathers evidence from the crime scene, questions witnesses, analyzes evidence in the laboratory, arrests suspects, and manages the criminal case once it proceeds to court. This is not how real criminal investigations are conducted.

Criminal investigations are typically conducted by several individuals, each drawn from a different but related area with its own body of specialized knowledge, training, and expertise. Most criminal investigations start with the arrival of uniformed patrol officers at the crime scene in response to an emergency telephone call. These officers are responsible for conducting an initial search of the scene and surrounding area for suspects, victims, witnesses, and physical evidence; arresting suspects still on the scene; identifying, ensuring the health and safety of, and obtaining preliminary information from victims and witnesses; ensuring the safety of the general public; securing the crime scene; and, in more serious cases, notifying detectives to attend at the location.

The detectives, typically the next to arrive, assume control of and are responsible for managing the investigation. Through the patrol supervisor, they are also responsible for ensuring that the uniformed officers have carried out their responsibilities, including securing the crime scene (see the discussion below) pending the arrival of forensic identification specialists.

In general, forensic scientists become involved only after the above work is complete and the evidence packaged, catalogued, and prepared for submission to a forensic laboratory. Although scientists might occasionally attend at a crime scene—for example, in the case of a buried body, a forensic archaeologist might be called—they typically do not. In large crime scenes or serious investigations (for example, a murder) it could be days or weeks before the evidence is examined by a forensic scientist. Moreover, no general forensic scientist performs all manner of testing on all types of evidence. Forensic science is broken down into subspecialties, each of which has its own unique areas of expertise—for example, firearms examiners, biologists who conduct DNA analyses, and chemists who attempt to identify unknown substances. The forensic sciences are discussed in Part II of this textbook.

DATABASES

The actual capabilities of those involved in crime scene investigation are, in most cases, far more limited than what is presented on television and in the movies. Perhaps one of the most unrealistic portrayals is the existence of an "omniscient database" (Durnal, 2010) that allows investigators to feed samples of anything from a tire print to a soil sample into a computer, which then, typically within seconds, returns a hit or a match. There are, of course, real investigative databases—for example, a fingerprint database (AFIS), a DNA database (NDDB), and a fired bullet and cartridge-case database (IBIS)—that are populated and maintained by law enforcement agencies and that can provide information of tremendous value. However, databases of the sort portrayed in popular entertainment, which allow an investigator to instantaneously match a piece of rope or a hammer, for example, to a particular manufacturer and place of sale in a matter of minutes, simply do not exist.

PRESENCE AND VALUE OF EVIDENCE

Often, in popular portrayals, the investigator walks around a crime scene with an intense look on his or her face and soon discovers the key pieces of evidence left behind by the perpetrator. In practice, crime scene investigation is not a simple matter of walking into a scene, sorting through the evidence, and taking only those key pieces that will clinch the case. Instead, it often involves making the most of what little evidence is left behind, and, on occasion, dealing with the frustration of a scene that yields little or nothing of evidentiary value.

Although it is true that investigators have a number of powerful tools to assist them in identifying and collecting evidence from a crime scene, it does not necessarily follow that the typical crime scene contains ample amounts of evidence that investigators need simply to gather up and submit for analysis to solve a crime. In theory, a typical crime scene may contain a great deal of evidence; in practice, such evidence may be difficult to locate and use. For example:

- A suspect may have left a fingerprint behind, but it may be on a greasy or rough surface that makes it difficult for the investigator to identify and collect.
- A perpetrator may clean the crime scene after committing the offence, resulting in the destruction of some evidence.
- A suspect may be caught on video surveillance but may be wearing a disguise that makes identification exceptionally difficult.
- A perpetrator may wear gloves to cover his or her hands during a break and enter.
- Traces of blood, hair, or skin; flakes of paint; or bits of plastic at an outdoor crime scene may be dispersed or destroyed by a heavy rain before they can be identified and collected.

In addition to limitations on the evidence available at a crime scene, other aspects of the process of investigation and analysis can contribute to only a small subset of evidence available at a scene making its way into the courtroom.

TIME FRAME FOR COLLECTION AND ANALYSIS

Evidence collected from a crime scene by a forensic identification specialist is routinely submitted to an intake officer at a forensic laboratory, typically a civilian employee, who ensures that it is properly packaged, assigns it a tracking number, and logs it into a computer database. The evidence is then assigned to various scientists for analysis, depending on the nature and amount of the evidence and the type of analysis required. The results of those tests might be available to the investigator within days, but more often it takes weeks, or sometimes months. Time frames depend on many factors, including the nature and complexity of the testing required; the workload of the laboratory; the availability of a particular scientist; and the oversight process in place at the forensic facility, which involves

the scientist's report being reviewed by a supervisor before being approved for release to the investigator.

Sometimes, because of the seriousness of the crime or for public safety issues—that is, when there is a pressing need to identify or link an individual to a particular crime—an investigator can request that the laboratory give priority to certain evidence, but, typically, evidence is submitted to the laboratory, enters the queue, and waits in secure storage until a scientist is available to analyze it. Although the bureaucracy surrounding access to the analysis process can sometimes be negotiated, depending on the nature of the crime, the analytical process itself cannot be rushed. The scientific analysis of evidence takes as long as it takes—and it rarely takes as little time in reality as it does on television.

MYTHS REGARDING THE SUPERIORITY OF PHYSICAL EVIDENCE

CSI lead forensic investigator Gil Grissom embodies the notion that criminal investigation can be a purely objective, evidence-based process. In one episode of the popular television program, Grissom is challenged by someone who demands to know why the public should believe Grissom's account of a controversial police shooting. Grissom responds by saying that the results of his forensic investigation should be believed because he is a scientist. He identifies, collects, and examines physical evidence from crime scenes to determine who did what to whom and how. According to Grissom, "Physical evidence cannot be wrong. It doesn't lie. It's not influenced by emotion or prejudice. It's not confused by the excitement of the moment" (CBS, 2005, as noted in Ruble, 2009, p. 4).

In addition to the popular adage "physical evidence does not lie" (in contrast, sometimes, to testimonial evidence), there should be an equally powerful one: "Physical evidence may not *lie*, but it does not simply *speak* for itself." Physical evidence does not tell its story independent of human involvement. The story of physical evidence is told through an involved process in which people identify, collect, preserve, analyze, and interpret the significance of the evidence, and the potential for error exists at every stage of this process—for example, evidence can be overlooked, lost, or become contaminated; the analysis of physical evidence can be faulty; and the interpretation of that analysis can be flawed. Despite idealistic notions about the inherent superiority of physical evidence, the belief that it can provide us with an objective certainty not possible with, for example, eyewitness testimony must be tempered. Physical evidence can and has been negatively affected by the actions, sometimes subjective, of investigators and others involved in the criminal justice process. Therefore, we must be as cautious interpreting the significance of physical evidence as with any other type of evidence.

THE DUTY TO COLLECT AND PRESERVE EVIDENCE

Before discussing *how* evidence from a crime scene should be collected and preserved, let's revisit the legal *duty* on the Crown and the police to collect and preserve evidence. *R v Stinchcombe* requires that the Crown disclose the "fruits of the investigation" (1991, p. 326) to the accused. This places a corollary duty on the police to collect and preserve all material pertaining to its investigation of the accused and on the Crown to take steps to preserve evidence that has been gathered. Failure to collect or preserve evidence in accordance with legal requirements might constitute an improper use of police discretion, an abuse of process,

an obstruction of justice, or a breach of the accused's Charter rights, all of which affect the Crown's ability to prosecute a case. The legal consequences of lost or destroyed evidence are explored further in Chapter 13, The Duty of Disclosure.

Although police officers have a significant amount of discretion in deciding how to carry out their duties—including how and when to collect and preserve evidence—there are limits to this discretion. The Supreme Court case *R v Beaudry* (2007) is the principal authority on the limits of police discretion as it relates to the offence of the obstruction of justice (*Criminal Code*, 1995, s. 139(2)). The case dealt with a police officer, Beaudry, who deliberately failed to gather evidence against another police officer who he had reasonable grounds to believe had been operating a motor vehicle while impaired by alcohol. Beaudry was subsequently charged with obstructing justice. The suspect officer was apprehended while driving at a high rate of speed with a flat tire after going through a stop sign, nearly colliding with a median, and then continuing for some distance even after the pursuing police vehicle's emergency lights had been activated.

The accused officer argued that his decision not to take breath samples from the suspect officer was a proper exercise of his discretion. The court confirmed that, although discretion is an essential part of both police work and the criminal justice system, such discretion is not absolute and its use must be justified. In determining whether a particular exercise of discretion is justified, a court will consider whether the discretion:

1. was proportionate to the seriousness of the offence, and
2. was exercised in the public interest.

In *Beaudry*, the offence was a serious one in which the impaired officer presented a danger to public safety. The court stated that although in some cases the exercise of police discretion is routine and clearly justified—for example, when giving a young person caught stealing a candy bar a stern warning and contacting his or her parents instead of laying a criminal charge—in other exceptional cases officers will be required to explain their decisions in detail. In *Beaudry*, the accused officer's preferential treatment of the impaired driver because he was a police officer was an improper use of his discretion. His decision not to obtain breath samples was an obstruction of justice because the officer knew that such evidence was necessary to prove the offence.

PRINCIPLES OF CRIME SCENE INVESTIGATION: PREVENTING CONTAMINATION AND ENSURING CONTINUITY

In any investigation, ensuring the integrity of evidence is key both to *whether* the evidence will be admitted into court and, if so, how much *weight* the court will give the evidence. The integrity of evidence is protected when the individuals

Investigator examining blood splatter at a crime scene.

who work with evidence follow best practices in the collection, packaging, and analysis of evidence, which help prevent **contamination** and ensure continuity.

The 19th-century French criminologist Edmond Locard, regarded by many as one of the founding fathers of modern forensic science, is, perhaps, most famous for formulating what has come to be known as **Locard's exchange principle**, which states that "every contact leaves a trace." In 1953, criminologist Paul Kirk published a highly influential text entitled *Crime Investigation*, in which he described the operation of Locard's principle so vividly that his words are often incorrectly attributed to Locard himself:

> Wherever he steps, whatever he touches, whatever he leaves, even unconsciously, will serve as a silent witness against him. Not only his fingerprints or his footprints, but his hair, the fibres from his clothes, the glass he breaks, the tool mark he leaves, the paint he scratches, the blood or semen he deposits or collects. All of these and more, bear mute witness against him. This is evidence that does not forget. It is not confused by the excitement of the moment. It is not absent because human witnesses are. It is factual evidence. Physical evidence cannot be wrong, it cannot perjure itself, it cannot be wholly absent. Only human failure to find it, study and understand it, can diminish its value. (Kirk, 1953; quoted in Chisum & Turvey, 2007, p. 30)

contamination
the introduction of material unrelated to the commission of the crime into a crime scene after the crime has occurred

Locard's exchange principle
formulation by one of the founding fathers of modern forensic science, Edmond Locard, stating that "every contact leaves a trace"

Although it has a more specific application within forensic science, Locard's principle is central to the issue of crime scene contamination. If "every contact leaves a trace," then anyone who enters a crime scene after a crime has occurred—such as a police officer—will both leave behind evidence of his or her presence and take away some trace from the scene. (In the case of a police officer, the evidence left behind will be unrelated to the offence, but the evidence taken away *may* be related to it.) This process is one way in which a crime scene can be contaminated or evidence that is potentially related to the crime can be lost.

cross-contamination
the transfer of material from one piece of evidence to another

Cross-contamination is another kind of contamination. For example, a forensic identification specialist wearing protective gloves might pick up a piece of bloody evidence from one part of the crime scene and package it, and, then, while wearing the same pair of gloves, pick up a second piece of evidence. An awareness of the potential for contamination in such circumstances and adherence to proper evidence-gathering protocols—for example, placing the pair of gloves used to pick up a particular bloody piece of evidence in the evidence bag along with the evidence and then donning a fresh pair of gloves to continue the evidence-gathering process—is critical not only for preventing contamination but for maintaining the *perception* that evidence was handled correctly.

As Nafte and Dalrymple (2011) point out, a forensic identification specialist does not want to find himself or herself in a situation where an argument can be made in court that the evidence might have been contaminated as a result of how he or she collected it. Even if, for example, the specialist used the same pair of gloves to pick up two separate, clean, dry stones—a scenario where the probability of cross-contamination is extremely low—the possibility of contamination would technically still exist. And it is this possibility or probability battle that a police witness will almost invariably lose. If contamination was a possibility (even if it has not been shown to have actually occurred) and the court perceives that an officer did not do all that he or she could reasonably have done to avoid it, then the value of that piece of evidence—and of the forensic investigation as a whole—might be called into question.

While Kirk's vivid description of the importance of physical evidence contains elements of truth, it also serves as the basis for popular portrayals of the nature of physical evidence that are misleading, such as the myth that physical evidence cannot lie. In criminal investigation, contamination of physical evidence is a fact, and investigators must be aware of the effects of contamination on the value of the evidence they collect. Contamination causes a change in the original state of the evidence, which may, in turn, affect the interpretation and value of that evidence later in the investigative process, such as during forensic testing.

The potential for crime scene contamination exists in the period between when a crime occurs and the police arrive to secure the scene. Some degree of scene contamination will likely occur as a result of police, medical, and other emergency services personnel entering the crime scene to safeguard life or property, search for victims or suspects, and gain some preliminary sense of what

has occurred. And when forensic identification specialists and detectives finally arrive at the crime scene and begin to identify and collect evidence, the crime scene is methodically "destroyed" by the very act of moving through it and removing items. As a result, the investigator's task when managing a crime scene is not so much to *prevent* crime scene contamination—although that is the ideal—as it is to ensure that all contamination is *fully documented*, and then to ensure that *no further unnecessary contamination* takes place. This is achieved primarily by:

1. securing the crime scene and controlling access to it,
2. ensuring that proper evidence collection procedures are followed, and
3. documenting the actions of all involved individuals.

These measures are discussed later in this chapter.

One of the other key principles that guides the collection of evidence during an investigation is ensuring continuity. As discussed in Chapter 1, The Role of Evidence in the Prosecution of Criminal Offences, one of the factors that determines how much weight is given to a piece of evidence admitted into court is the Crown's ability to demonstrate its continuity—that is, to establish, in conjunction with the police, its history from the time it was found to the time it is produced in a courtroom. This includes showing both where the evidence was from the time it was collected at the scene until the time it was brought to court and who had contact with or access to it. The records maintained over the course of an investigation are key to accounting for each link in the chain, through such things as written notes, evidence logs, tamper-proof packages, evidence seals, computer entries, and oral testimony.

Given that evidence be something as small as a single strand of hair to something as large as an automobile, it is clear that a variety of challenges exist in terms of both collecting and safeguarding evidence as it works its way through the process—from the hands of the forensic identification specialist, to the laboratory of the forensic scientist, to the office of the lead investigator, and then to the courtroom. The best practice when gathering evidence is to allow as few people as possible to have contact with or control over it because this creates fewer links in the chain of continuity. Although, at times, the continuity of certain pieces of evidence may be conceded, or "admitted," by a defence lawyer and the Crown will not be required to demonstrate continuity, where continuity is an issue, *all* of the individuals who form part of the chain will likely be called to court as witnesses. The longer the chain, the greater the probability that one of its links will break.

WHAT IS A CRIME SCENE?

Although the definition of the term **crime scene** may seem obvious, the novice investigator needs to have a clear understanding of what it means. A simple definition might be that a crime scene is any place in which a crime occurred. A crime

crime scene
any place in which a crime occurred or in which evidence relating to a possible crime has been located

scene, however, is not only a place in which a crime occurred; it can also be a place in which evidence relating to a possible crime at some distant location or time has been located.

Consider the following: someone is shot inside a busy nightclub. The gunman runs out of the club and down an alleyway. He discards his jacket in a dumpster and throws a firearm onto the roof of a building. He then emerges from the alleyway, forces the driver of a stopped motor vehicle out of her car, and drives away. The vehicle is found abandoned two days later in a factory parking lot in a nearby town.

In this scenario, the primary crime scene is the nightclub, but there are a number of other crime scenes, all of which are related to and may provide evidence of the original shooting offence or the additional, related offences. Some of these scenes will likely be quickly and easily located and secured, while others may take some time to identify and secure. In other scenarios—for example, where a person is abducted and murdered and the body dumped in a remote location—it could potentially take months or even years before the crime scenes are discovered, secured, and examined.

Clearly, then, a crime scene can take many forms—it can be confined or extensive, located inside or outdoors, the only scene related to the particular offence, or one of many scenes related to the same investigation.

The nature, extent, and number of scenes are all factors that will help determine how quickly the scenes can be identified and secured, which, in turn, will affect the integrity of the evidence contained in those scenes. The longer a scene goes unidentified, the greater the potential for degradation, loss, or contamination of the evidence contained in that scene. An investigator cannot assume that the "known" crime scenes are the only ones that exist. Instead, he or she must make efforts to identify *all* potential scenes related to the offence under investigation to ensure that they are secured and preserved, pending proper forensic investigation.

A crime scene is generally regarded as the primary source of physical evidence—that is, evidence that may be used to identify a suspect or link him or her to another person or location. Note that the investigation of a crime scene and the gathering and preservation of evidence can also include, for example, a victim or a suspect who may have received injuries, which will need to be photographed, so that the record of the injuries may later be entered as evidence in court.

POLICE AUTHORITY TO ESTABLISH AND PROTECT A CRIME SCENE

***Waterfield* test**
a legal test that prescribes a way for a court to determine whether the exercise of a power *not* specified in a statute was justifiable

Temporarily restricting individuals' liberty—for example, by controlling access to a crime scene—is justified if the two criteria in the so-called ***Waterfield* test** are met. The test, which was originally set out in the English case of *R v Waterfield* (1963), and modified by the Supreme Court of Canada (*R v MacDonald*, 2014),

is used to determine the common powers of the police, and prescribes a way for a court to determine whether the exercise of a power *not* specified in a statute—sometimes called an *ancillary power*, or a power that arises out of a police officer's fundamental duty, such as the duty to investigate crime—was justifiable in a particular circumstance. For a restriction to be justified, it must meet the two-step criteria of the *Waterfield* test:

1. Does the action fall within the general scope of a police duty imposed by statute or recognized at common law? If the answer is yes, then the court must ask the second.
2. Did the actions constitute a justifiable exercise of power associated with the duty?

The interference with a person's liberty must be necessary for carrying out the particular police duty (such as excluding an individual from a crime scene), and it must be reasonable for the nature of the liberty interfered with and the importance of the public purpose served by the interference (*MacDonald*, 2014, paras. 35, 36). Where police exercise of an ancillary power does not meet the *Waterfield* test when weighed against the infringement of an individual's liberty interest, a court may find that exercise of police power to be unlawful and hold officers responsible (*Figueiras v Toronto (Police Services Board)*, 2015).

WHAT CONSTITUTES OBSTRUCTING AN OFFICER?

In *R v Lohidici* (2005), two police officers attended the scene of a motor vehicle collision in which the accused was a passenger in a van that had rear-ended another vehicle. The officers took control of the scene, identified the accused's friend as the probable driver of the vehicle, and took him to their cruiser to commence an impaired driving investigation. Fire and emergency medical services personnel also attended at the scene to deal with a fluid spill and to treat injured parties.

While all this was happening, the accused was running around the scene, yelling at people, and attempting to retrieve property from the van, including alcoholic beverages. The officers told the accused to stay away from the van because he was interfering with their investigation. The accused was told that if he continued his attempts to take property from the van he would be arrested for obstructing police. The accused refused to comply with the officers' instructions and, as a result, was arrested, charged, and found guilty of obstruction pursuant to section 129(a) of the *Criminal Code*. The judge found that the accused was repeatedly warned to stop getting in the way and to stop attempting to remove evidence from the scene. Despite being given multiple opportunities to stop, he continued to interfere with the police investigation.

In discussing the law of obstruction, the court pointed out that an individual does not need to completely thwart an officer in the execution of his or her duty to be guilty of the offence; he or she need only "impede," "affect," or make the officer's work "more difficult"; although note that such obstruction needs to be something more than merely a "trifling" or "momentary" action to be considered obstruction pursuant to section 129(a) (*Lohidici*, 2005, para. 19).

In some cases, police authority to control access to a crime scene may be complicated by past practices. In *R v Amat* (2003), members of the media had

historically been granted special access to crime scenes by the Calgary Police Service to gather information and photographs for news stories. In one circumstance, a police officer ordered a newspaper photographer out of a crime scene because he believed the possible presence of an armed person made the scene dangerous. The photographer refused to obey the order and was arrested and charged with obstructing police pursuant to section 129 of the *Criminal Code*. The court said that because the police had a long-standing policy of giving members of the media special access privileges, they had a corresponding obligation, beyond what they would have toward an ordinary member of the public, to explain to the photographer why they were taking away that privileged status. Because they had not done so, the photographer was found not guilty of obstructing police. In light of this decision, police services and police officers would be wise to consider the potential legal implications of their policies and practices regarding who has access to a crime scene. A prudent approach would be to allow access to only those individuals with a bona fide need to enter a crime scene—for example, police officers and other emergency workers.

CRIME SCENE INVESTIGATION: PRACTICAL AND PROCEDURAL CONSIDERATIONS

A number of practical and procedural issues must be considered to ensure that a crime scene is investigated in a thorough and professional manner. These issues are discussed in the sections that follow.

RESPONSIBILITIES OF FIRST OFFICERS TO ARRIVE AT THE SCENE

Uniformed officers are typically the first police personnel to arrive at a crime scene. Their primary responsibility is to safeguard life and to ensure that the scene is safe both for them and other first responders to enter and for any victims, witnesses, suspects, or members of the public who may be present. In the case of a violent crime—for example, where an armed suspect is present at the scene and poses an immediate threat to police or others—this may involve some officers setting up a secure perimeter, while other officers directly confront the suspect and attempt to take him or her into custody. In other situations, it may be more appropriate for the first officers to respond to contain the scene by setting up a secure cordon of police officers around it and then call for specialized officers, such as tactical or canine officers to attend the scene and ensure its safety. In still other situations—for example, where an office complex was broken into and a safe was stolen several days before police were called—the same sort of safety concerns may not exist.

After the first officers to respond to a crime scene and their supervisor—typically, a patrol sergeant—have met their primary responsibilities they will

- ensure that the crime scene is secured and preserved;
- search the scene itself and the surrounding area for suspects, victims, and witnesses; and
- request the attendance of investigative, forensic, or emergency medical or fire personnel.

The first officers must make careful notes about how they entered the crime scene, what route they took, what they saw, and what they did upon and following arrival. Such notations are part of documenting the crime scene to ensure that both the detectives and forensic identification specialists—and later, a court—can assess the state of the original crime scene and interpret any evidence found there. The first officers must document *all* their relevant activities, even negative ones, because police procedures and codes of conduct require that officers create accurate, honest records of the actions they take while carrying out their official duties.

If, for example, an officer dropped a gum wrapper, turned a light switch on or off, accidentally knocked something over or kicked something out of place, or did anything to potentially alter the crime scene in any way, the detectives and identification officers need this information. While common sense, basic police training, and experience generally prevent the occurrence of such events, the potential always exists. And although officers might be reluctant to admit that they did something they should not have, whether on purpose or by accident, such information is critical because any such act affects the integrity of the crime scene. Although errors may ultimately turn out to be of little significance, a failure to record them might result in an officer's integrity being questioned, which could affect the integrity of the entire investigation. Both the officer involved and, later, the investigator must be sure to record any such events in their police notebooks.

SECURING AND PRESERVING THE SCENE

The security and preservation of a crime scene is the responsibility of the first officers to arrive on the scene. The importance of these actions cannot be stressed enough—evidence that is lost or destroyed because a crime scene was not properly secured can rarely be recovered and, even if it is, its integrity may be irreparably damaged.

A crime scene typically consists of (at least) an inner core and an outer perimeter. The inner core is the area in which the actual criminal act took place, while the outer perimeter is, typically, the area that includes the entry and exit routes surrounding the core. One of the mistakes that a novice officer might make in establishing a crime scene is to make it smaller rather than larger. It is far better to

err on the side of caution and cordon off a larger area than to cordon off a smaller area only to discover, too late, that the actual crime scene is far more extensive than was first thought. To return to our earlier example of the shooting in the nightclub, the uniformed officers who first arrive at the scene may be inclined to cordon off the nightclub only, when in fact the actual crime scene—which involved the disposal of evidence, such as the suspect's jacket and firearm—is far more extensive and involves the entire block, encompassing the nearby alleyways and adjacent buildings.

As a general rule, officers should designate as large a crime scene as reasonably necessary based on a worst-case assumption about the severity of the crime and the area involved, and reduce the size only when or if further investigation indicates that it is prudent to do so. A larger perimeter can always be reduced without sacrificing the integrity of the scene and the evidence it contains, but expanding a smaller perimeter *always* involves sacrificing the integrity of that portion of the scene that, for a time at least, was left unprotected. In some circumstances—for example, where information is later received indicating the existence of additional crime scenes—such an expansion, while far from ideal, may become necessary. Using the nightclub shooting example, if police had designated only the building where the shooting occurred as the crime scene, but later learned that the victim had died, and witnesses had reported seeing the gunman discard evidence in a nearby alley as he fled, it would be very difficult to expand what is now a murder crime scene without sacrificing the integrity of the evidence that was found in the areas near the nightclub.

Once police have secured a crime scene, whether inside or outside, large or small, the same principle applies—only those who need to enter the scene for a bona fide purpose related to the investigation or for an emergency should be allowed to do so. Individuals who may enter typically include the investigators assigned to the case, the identification officers responsible for examining and documenting the scene and collecting evidence, and other required officials—for example, the coroner in a death investigation.

Controlling access to a small indoor crime scene—for example, an apartment unit—can be achieved simply by placing a police officer in the doorway and affixing a police seal to the door itself. However, controlling access to a large, outdoor crime scene—for example, the scene of a hit-and-run fatality—can be much more difficult and involve the use of multiple officers to cordon off a large area for several hours while the investigation is underway. Controlling access to such a scene would likely involve street closures, which would restrict both vehicular and pedestrian movement.

After a crime scene has been secured, a careful record (usually in the form of a crime scene access log) must be kept of all individuals who enter the crime scene, including a record of when, why, and under whose authority they entered (normally, the officer in charge of the investigation). Again, the importance of controlling access cannot be overstated, because the integrity of the scene affects

both the integrity of the evidence and that of the investigation as a whole. The investigator must be able to determine who has entered the scene; how; and exactly what, if anything, they did while there in order to ensure that the scene may be properly interpreted and that any possible contamination is documented.

RESPONSIBILITIES OF DETECTIVES

For this discussion, we will assume that the person responsible for conducting the investigation of the crime to which the scene is related is a detective and not a uniformed officer, as may sometimes be the case with minor crimes. We will also assume that by the time the first detective arrives, the uniformed officers have met their primary responsibility of ensuring their own and others' safety, and that the officers and their supervisors have either completed or are in the process of carrying out the other duties outlined above.

The job of the detective is to manage the investigation, and he or she will take charge upon arriving at the crime scene. The detective will typically meet with the senior uniformed police officer or the uniformed supervisory officer on location to ensure that all the necessary things have been or are being done and to receive a preliminary briefing. Because levels of experience can vary widely among uniformed officers, including uniformed supervisory personnel, detectives cannot simply assume that proper crime scene procedures have been followed. The detective is responsible for ensuring the crime scene is properly protected and that a preliminary search for evidence has been conducted before a forensic identification specialist arrives, who will search the scene in detail. In smaller police services, the investigator alone might be responsible for gathering physical evidence, in which case he or she will normally have had basic training in the principles of evidence gathering.

IMPORTANCE OF MENTAL PREPARATION BEFORE ATTENDING A CRIME SCENE

A veteran homicide investigator once emphasized to a younger detective the importance of "preparing your mind" before attending a crime scene. Although such preparation is especially important in the case of a violent or a large and complicated crime scene—for example, a homicide or a hit-and-run motor vehicle fatality—it is beneficial to the investigation of *any* crime scene.

Crime scenes can be active and intense environments, and detectives may find it helpful to think about how they will manage a scene before they arrive. After a detective reaches a scene, he or she will need to quickly prioritize the many demands from people seeking information, direction, or assistance, often before the detective has even exited the vehicle. The veteran homicide detective suggested to the younger colleague that stopping the vehicle a short distance from a scene and taking a minute to collect his or her thoughts or having a short conversation with a partner is time well spent before entering a scene.

While dealing with the various demands, an investigator must remain focused and ensure that the available resources are managed effectively to identify, collect, and preserve the physical evidence present at the crime scene. A detective who fails to take charge and ensure that a serious crime scene is managed properly can cause irreparable damage to an entire investigation.

Uniformed officers may also find it valuable to refresh their minds regarding their priorities before arriving at a crime scene. However, because they need to attend serious crime scenes as quickly as possible, they rarely have the same opportunity as a detective to consider their actions before their arrival. A uniformed officer must remember that safety comes first—his or her own and that of the others who may be present at the scene—and that only after everyone's safety has been ensured should the officer begin to protect the scene for the investigation.

Upon arriving at a crime scene, an investigator will typically meet with individuals to obtain and provide information:

First officers to arrive at the scene and other first responders. Before initiating a search of the scene, the investigator should have a preliminary discussion with the officers who were first on scene and with any other first responders—for example, emergency medical or fire personnel. They may be able to provide information regarding what was happening in or around the scene when they first arrived.

Uniformed police officers will be able to advise the investigator about any victims, witnesses, and suspects they have identified; provide an account of what any victims and witnesses have said; and discuss any evidence they may have located. They may require direction about the management of various aspects of the crime scene. The investigator will want to ensure that the officers have made careful notes, as described above, about how they entered the crime scene, what route they took, what they saw, and what they did when they first arrived. Obtaining this information before conducting an initial walk through may be valuable in drawing the investigator's attention to potentially significant aspects of the scene.

Forensic identification specialists. If present, or upon their arrival, these officers will need to consult with the detective in charge of the investigation before beginning their work.

Senior police officers. Senior supervisory officers may attend the scene, especially when a serious crime has occurred—for example, a murder or a child abduction—seeking information to send up through the police chain of command.

Media. In more serious cases, the media will likely be at the scene, seeking information at a time when the investigator himself or herself likely knows relatively little about the event. Upon arrival at the scene of a serious crime, a reasonable approach for an investigator to take with the media, especially if there are multiple members present, is to address them as a group outside the secured crime scene. Investigators should introduce themselves and any partners; advise the media that they are the investigator in charge (if they are); explain they have just arrived and need time to speak to the uniformed officers on scene; and

inform the media that after they have spoken to the officers, they will return to make a statement. Investigators must then come back and speak to the media as promised.

The media can be a valuable resource for investigators in terms of getting requests for information out to the public and generating potential leads. When speaking to the media, an investigator should always be truthful but also careful to limit the amount of information released about the crime under investigation. Releasing information about evidence can potentially damage the investigation at a later stage—for example, if information that only the police and those involved in the crime should know becomes public knowledge, it may contaminate subsequent interviews or interrogations. A safe approach to making an initial statement to the media about a crime being investigated is to give them basic information about what has occurred and describe the general process that police will be following. For example:

> Members of the press, my name is Detective Jones and I am the officer in charge of this investigation. Police received a 911 call earlier today and as a result uniformed officers attended 123 Main Street where they located the body of a deceased female inside the residence. The identity of the victim is being withheld pending the notification of next of kin. A post-mortem examination will be held later to determine the cause of death. Police are appealing to the public for their assistance in this investigation; anyone who has information about what may have occurred at 123 Main Street is asked either to call Detective Jones at 647-555-5555 or to provide information anonymously through Crime Stoppers at 1-800-222-TIPS (8477).

DOCUMENTING THE SCENE

Whether a pencil is used to draw a sketch or a laser to create a three-dimensional rendering, documenting a crime scene has one reason—to create a record of the scene that preserves the conditions that existed when the crime scene was first identified. This allows investigators, lawyers, and a court to make informed judgments about the value of evidence.

Documenting a crime scene involves creating a record of:

1. the content (the evidence), and
2. the context (the environment in which the evidence was found or the relationships that exist between things).

The proper analysis of evidence requires an appreciation of both the nature of a particular piece of evidence and the relationship of that evidence to a specific environment, context, or scene (Houck, 2009). Context is important because it can affect both how the evidence is interpreted and the weight given it in the overall investigation or prosecution. For example, evidence that links an individual to a particular scene is far more significant if the individual claims never to have

been at the scene than if the individual admits to having been there. Similarly, a scene in which an individual is found deceased in his own locked apartment with a ligature tied lightly around his neck, sexual paraphernalia strewn about, and no signs of a struggle may be interpreted differently from a scene in which an individual is found dead with a ligature tied tightly around his neck in an apartment that shows signs of a forced entry and a fight having taken place. The former may be interpreted, for example, as a case of autoerotic asphyxia, while the latter may be interpreted as a homicide by strangulation.

Historically, much crime scene documentation was accomplished through the creation of police notes, sketches, photographs, and drawings. Although police note taking is still an important aspect of documenting a crime scene and creating a record of the larger investigation, extensive use is now made of both still photography and video recordings. Digital records of crime scenes, individual pieces of evidence, and a victim's or suspect's injuries, have many advantages, including ease of creation, storage, searching, retrieval, printing, presentation, and disclosure. (See Nafte & Dalrymple, 2011, chapter 3, for a general reference on this topic.)

In addition to digital recording technologies, other common methods used to document crime scenes include, for example, the Leica or Sokkia "total station"—a surveying device that is used to measure and create maps of crime scenes and to plot the locations at which various pieces of evidence were located (Cheves, 2004)—and laser devices, such as the Faro Laser Scanner Focus 3D, which creates three-dimensional crime and accident scene reconstructions. For large outdoor scenes—especially involving serious automobile collisions—a number of police services have begun using aerial drones, which allow them to quickly and accurately capture photographic images and mapping data that can be used to create a highly detailed record of the scene.

It is especially important, particularly in large investigations that may have literally hundreds of pieces of evidence, that there be a mechanism to provide a quick overview of the evidence related to the case. The creation and maintenance of a master evidence log serves this purpose. A **master evidence log** is a record of all the individual pieces of physical evidence collected at a crime scene and what has been done with them. At a glance, a reader—be it the forensic identification specialist, the detective in charge of the investigation, the Crown attorney, or a defence lawyer—can answer such questions as whether a particular piece of evidence has been submitted for forensic testing or is being kept in secure storage awaiting court proceedings.

master evidence log
a record of all the individual pieces of physical evidence collected from a particular crime scene and what has been done with them

Because it typically includes information such as evidence descriptions, evidence bag or police seal numbers, the location in which evidence was found, whether evidence was submitted for forensic testing, and the results of such tests, an evidence log also serves as a reference in discussions between various parties—for example, the Crown, defence, investigator, and forensic scientist. When conducting a pre-trial witness-preparation interview with a forensic scientist,

for example, a Crown attorney can refer to Exhibit number 87, a white T-shirt with a bloodstain, collected from the second floor hallway of 345 Main Street and placed in evidence bag #B90785, then submitted to the laboratory with a request from investigators for a scientist to develop a DNA profile to compare that profile with one that was developed from a hammer located in the alleyway behind the residence. During the interview, the Crown attorney may ask the forensic scientist to describe what sort of tests were performed on the shirt, what results were obtained, what comparisons were carried out, and what the results were. It would be difficult to have such a discussion, or later discussions in court, without the benefit of a document such as a master evidence log to serve as a reference point.

SEARCHING THE SCENE AND GATHERING EVIDENCE

For this section, assume that the appropriate judicial authorization to search the crime scene and seize evidence has been obtained and that a search can now legally begin.

Collecting evidence from a crime scene involves far more than simply picking up items and placing them in bags—a process sometimes derisively referred to as "bagging and tagging." As mentioned, specially trained forensic identification officers are responsible for examining crime scenes in order to document, identify, collect, preserve, and analyze physical evidence.

Before any piece of evidence may be collected, it must first be photographed *in situ*—that is, in the location in which it was originally found. This is in addition to the overall documentation of the crime scene discussed above. A paper or plastic scale (similar to a small ruler) is placed next to the item to be collected, a wide-angle photograph is taken to show the location of the item in the context of the larger crime scene, and then a close-up photograph is taken to show the size and detail of the item itself. The item is then collected and put into an appropriate evidence container, with the kind of container being dictated by the nature of the evidence. Regardless of the kind of container used, it must be properly sealed and labelled to ensure that no contamination, loss, or substitution can occur and that critical information—such as when and where it was gathered and by whom—is recorded on the container.

As discussed in Chapter 2, Searching for and Securing EvIdence: Legal Considerations, authenticating evidence, which involves a witness testifying that the item a party is seeking to admit is what it is represented to be, is an important part of getting evidence admitted into court. For example, if the Crown seeks to enter a knife that the police seized from the suspect as an exhibit, they must establish that it is *the same knife* that the police seized. This fact is normally established through the testimony of a witness—for example, the police officer who actually seized the knife—who is able to testify that the exhibit is, in fact, what it is purported to be.

For items that are generic and cannot easily be marked for identification—for example, a small shard of glass—it is critical to ensure that the evidence is placed securely inside a specially prepared evidence container. Specially designed plastic evidence bags, for example, include space on the exterior of the bag where details regarding the evidence—for example, when it was collected—can be recorded. The bags also have individual serial numbers imprinted on them and strong adhesive closures to allow them to be securely sealed. Different kinds of evidence can be placed in different kinds of containers as required—for example, a piece of bloody clothing can be placed inside a paper bag to allow the blood to dry. In such cases, pertinent information can be written on the exterior of these containers and a secure police seal placed over the opening. Police evidence seals have individual serial numbers, with space on which an investigator can write information. The use of an evidence seal allows an officer to say—and to demonstrate—whether the seal is intact and whether a package into which evidence was placed has been opened. If the seal has been broken (possibly because it was necessary to remove the evidence for testing), then the person who broke the seal will have made a record and returned the evidence to the original or a similarly secure container and affixed a new seal to it. In this way, the investigator can establish continuity of possession, which is a critical component in maintaining the integrity of evidence.

It is also good practice, where possible, to place a marking directly on the actual evidence in addition to on the container. For example, an officer who collects a shoe should carefully write his or her initials and badge number on the shoe itself, taking care not to disturb any evidence that might be attached to it—for example, blood or hair. In court, the officer will be able to say, "Yes, that is the shoe that was collected at the scene; I know that because I collected it, placed an identifying mark on it, and submitted it into evidence." Evidence that is singular in nature—for example, a firearm with a unique serial number—does not necessarily need to be marked in this way (although it could be, for even greater certainty); the collecting officer can use the unique features to identify the evidence as that collected at the crime scene, where the officer recorded the serial number of the firearm in a notebook.

RELEASING THE CRIME SCENE

Determining when a crime scene should be *released*—that is, when the police should relinquish control over it—is a decision typically made by the officer in charge of the investigation (usually a detective). In investigations involving a death, in which the scene is under the authority of the coroner, practically speaking, the officer in charge of the investigation is still the one to order police to relinquish the crime scene, but *only* after consulting with the investigating coroner and confirming that it is appropriate to do so. This typically takes place after the post-mortem examination has been completed, and after the officer in

charge of the investigation is satisfied that the scene has been thoroughly documented and all potential evidence has been identified, collected, and preserved for later analysis. This determination will usually be made in consultation with the forensic identification specialist. Death investigations are discussed in detail in Chapter 12, Death Investigation.

Before making a decision about when to release a crime scene, the detective will normally discuss the crime scene with the forensic identification specialist and walk through the scene to ensure that nothing more of relevance can be gleaned from it. Although some crime scenes—for example, a simple break and enter—can be examined and released by police in a matter of hours, after photographing the scene and dusting for fingerprints, other, more serious crime scenes—for example, a homicide—might be held by police for days or even weeks. In extreme cases, a crime scene might be held for years. In the investigation of the farm complex belonging to serial killer Robert Pickton, for example, the crime scene was held by police for almost two years, during which time 125 identification officers collected more than 75,000 exhibits (Procunier, 2011).

KEY TERMS

contamination, 77
crime scene, 79
cross-contamination, 78
CSI effect, 70
detective, 71
forensic identification specialist, 72
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forensic scientist, 72
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REVIEW QUESTIONS

TRUE/FALSE QUESTIONS

____ **1.** The way in which a crime scene is protected by police and the evidence found there is documented, collected, and preserved can affect the ability of a detective to determine what happened there.

____ **2.** The decision of when to release a crime scene from police control is made exclusively by the forensic identification specialist.

____ **3.** Typically, the gathering of evidence at a serious crime scene is done by the first officers to respond to the scene.

____ **4.** A police officer has absolute discretion to determine what evidence he or she will or will not gather from a crime scene.

____ **5.** When making a statement to the media it is important for the officer in charge of an investigation to be truthful; however, he or she must also be careful not to divulge details about evidence gathered during the investigation.

____ **6.** Forensic scientists routinely attend crime scenes to assist the police in locating and analyzing physical evidence.

MULTIPLE-CHOICE QUESTIONS

1. What does Locard's exchange principle state that every contact leaves?
   - **a.** a mark
   - **b.** a clue
   - **c.** a trace
   - **d.** residue
2. Which of the following are investigative databases police can use to assist them in identifying different types of evidence?
   - **a.** AFIS, NDDB, IBIS
   - **b.** AFIS, IBIS, OWDB
   - **c.** IBIS, OWDB, ADIS
   - **d.** IBIS, ADIS, NDDB
3. In court, the Crown and the police seek to demonstrate the history of evidence. What is another word for this history?
   - **a.** authenticity
   - **b.** validity
   - **c.** continuity
   - **d.** objectivity
4. A crime scene typically consists of (at least) which of the following?
   - **a.** an inner core and an outer perimeter
   - **b.** an inner perimeter and an outer core
   - **c.** an immediate scene and a distant scene
   - **d.** a private perimeter and a public perimeter
5. On what basis should officers, as a general rule, designate as large a crime scene as seems reasonably necessary?
   - **a.** information received by the police from the public
   - **b.** a worst-case assumption about the severity of the crime and the area involved
   - **c.** the physical evidence that was observed by the first officer to respond to the scene
   - **d.** the opinion of the most senior officer present at the crime scene
6. Which of the following is the most apparent CSI effect?
   - **a.** the notion that physical evidence cannot lie
   - **b.** the idea that there is always ample usable evidence to be located at a crime scene
   - **c.** the confusion created about the respective roles of the various people involved in the investigation of crime
   - **d.** the idea that police have a general database that they can use to match a wide variety of items to a manufacturer or place of sale
7. Documenting a crime scene involves creating a record of both the evidence and the environment in which the evidence was found. Which two terms describe this?
   - **a.** content and context
   - **b.** continuity and contamination
   - **c.** inculpatory and exculpatory
   - **d.** forensic and location
8. A crime scene is not only the place in which a crime occurred. Which of the following can also be part of a crime scene?
   - **a.** a place in which evidence relating to a crime is thought to be located
   - **b.** a place in which evidence relating to a crime is now or was previously located
   - **c.** a place in which evidence relating to a crime may be found
   - **d.** a place in which evidence relating to a crime could be hidden

SHORT ANSWER QUESTIONS

1. Discuss what authority police have to establish and protect a crime scene, and identify the sources of that authority.
2. Although some people maintain that physical evidence speaks for itself and thus cannot lie, physical evidence is not necessarily superior to testimonial evidence—for example, an eyewitness statement. Discuss why this is the case.

3. An investigator's task when managing a crime scene is not so much to prevent crime scene contamination (although that is of course the ideal) as it is to ensure that all contamination that has or will necessarily occur is fully documented and then to ensure that no further unnecessary contamination takes place. Discuss the primary means by which an investigator can achieve this.

CASE STUDY

You are a uniformed police officer assigned to mobile patrol, and you are working alone. You receive a radio call from your dispatcher to attend an address for an "unknown trouble" call. On arriving at the scene you are met in the lobby of a large apartment building by a woman who tells you that a man kicked in the door of her apartment and threatened to kill her with a hammer if she did not agree to have sex with him. She believes that he may have been either drunk or high on drugs and she reports that one of his hands was "all bloody" because he punched his fist through the wall in her living room. The victim reports that during the sexual assault, which occurred on the couch, the suspect hit her repeatedly on the head and then blacked out, giving her a chance to escape from her apartment to the lobby where she was able to call 911. The victim appears to be in shock and tells you that all she wants you to do is drive her to her sister's house so she can forget about what has happened to her. The superintendent of the building is also in the lobby and he tells you that he thinks the suspect is still in the apartment; he says that he will stay in the lobby with the victim while you go to the victim's apartment to check for the suspect.

Using the information in this scenario, answer the following:

1. You and your partner are dispatched to the scene to back up the first officer to respond. There are no more uniformed patrol officers available to call on for assistance. Describe what actions you and your partner would take upon arriving at the apartment building.
2. Describe the actions you would take immediately after meeting the victim and hearing her account of the assault.
3. You are the forensic identification specialist assigned to assist with the investigation by searching for and collecting physical evidence. You are briefed about the crime by the first officer on scene, and after consultation with the detective in charge of the investigation, you commence an examination of the scene. Describe one of the primary legal concerns you would want to address before beginning your examination; then describe some of the types of evidence you would expect to gather.

IT'S YOUR MOVE, OFFICER!

You are the detective in charge of a homicide investigation and you are giving a press conference during which you provide members of the media with an overview of your investigation. You explain that you are looking for a particular suspect and you provide those in attendance with a description of the person you are seeking. When you ask members of the media if they have any questions, a reporter for a major television network asks you why you believe this particular person is a suspect in the murder and what specific evidence you have that links them to the killing.

1. How would you respond to this question?
2. Would you provide the media with your specific reasons for believing that the individual you are seeking is responsible for the killing?
3. How could providing investigative details to the media and the public during an ongoing investigation be potentially problematic if a suspect is arrested and charged with the murder?